

## **REMARKS**

The following are applicant's response to issues raised in the Office Action.

Claims 1-23 have been canceled. Claims 24-25 were previously added. New claims 26-37 have been added.

### **Rejection under 35 USC 103(a)**

Claims 1-3, 5-7, 8-14, 22-23 and 24, were rejected under 35 USC 103(a) over Li (U.S. 5,854,974) in view of Poulin (U.S. 6,278,872).

Claim 25, was rejected under 35 USC 103(a) over Li (U.S. 5,854,974) in view of Poulin (U.S. 6,278,872) and further in view of Himono (U.S. 3,913,037).

Li discloses a compensated ring mixer. Poulin discloses a frequency converter with improved linearity. Himono discloses a broadband balanced modulator.

Neither Li nor Poulin teach, disclose or suggest, either alone or in combination, as in claim 24, a double balanced mixer that has the windings of the radio frequency balun series connected to the windings of the intermediate frequency balun. Claim 24 recites that the fifth winding is series connected to the ninth winding. The eighth winding is series connected to the twelfth winding. The diode rings mix the local oscillator signal and the RF signal to produce the intermediate frequency signal.

Li discloses an RF balun 118 connected to diode rings 104 and 108. No intermediate frequency balun is shown. Poulin discloses an output balun connected to MESFET mixer 200. There is no disclosure or suggestion in either reference of using series connected RF and IF baluns.

Combining the cited references in the manner of the office action can only be arrived at in view of the Applicant's specification using hindsight reasoning. It has been held that one cannot use hindsight reconstruction to pick and chose among isolated disclosures in the prior art to depreciate the claimed invention. In Re Fine, 5 USPQ2d 1596, 1600 (Fed. Cir. 1988).

Assuming that the combination of Li and Poulin was possible, at most, the combination would suggest connecting the output balun of Poulin with the IF port 134 of LI. This would result in a combination that still fails to meet the limitations of the presently claimed invention as the IF balun would not be in series with the RF balun.

Dependent claim 25 depends from independent claim 24 and adds additional patentable features and is allowable therewith.

New independent claims 26, 31 and 35 also recite a double balanced mixer that has a radio frequency balun and windings series connected to the an intermediate frequency balun and windings. As discussed previously for claim 24, neither Li nor Poulin teach, disclose or suggest, either alone or in combination, a double balanced mixer that has a radio frequency balun series connected to an intermediate frequency balun.

Dependent claims 27-30, 32-34 and 36-37 depend from independent claims 26, 31 and 35, respectively and add additional patentable features and are allowable therewith.

A notice of allowance is respectfully requested.

Respectfully submitted,

A handwritten signature in cursive script, reading "Kevin Redmond".

Kevin Redmond  
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